

CLAIMS:

1. An optical recording medium comprising a support substrate and a plurality of information recording layers, at least one information recording layer other than an information recording layer farthest from a light incidence plane through which a laser beam is projected comprising a first dielectric film, a second dielectric film and a recording layer disposed between the first dielectric film and the second dielectric film and a thickness of at least one of the first dielectric film and the second dielectric film being determined so as to be equal to or larger than D_{21} and equal to or smaller than D_{22} , where D_{21} is smaller than D_2 , D_{22} is larger than D_2 , and D_{21} and D_{22} are determined in such a manner that the dependency X of light transmittance of the information recording layer other than the information recording layer farthest from the light incidence plane on the wavelength of a laser beam is smaller than $1.2 \cdot X_2$ when at least one of the first dielectric film and the second dielectric film has a thickness of D_{21} to D_{22} , where X_2 is the wavelength dependency corresponding to a second smallest thickness among a plurality of thicknesses at which the dependency X of light transmittance of the at least one information recording layer other than the information recording layer farthest from the light incidence plane on the wavelength of a laser beam locally becomes minimal.
2. An optical recording medium in accordance with Claim 1, wherein the laser beam has a wavelength of 380 nm to 450 nm.
3. An optical recording medium in accordance with Claim 1, wherein the at least one of the first dielectric film and the second dielectric film is formed of a mixture of ZnS and SiO_2 .

4. An optical recording medium in accordance with Claim 2, wherein the at least one of the first dielectric film and the second dielectric film is formed of a mixture of ZnS and SiO₂.

5. An optical recording medium in accordance with Claim 3, wherein the light incidence plane is disposed on the side opposite to the support substrate with respect to the plurality of information recording layers, the first dielectric film is disposed on the side of the light incidence plane with respect to the recording layer and is formed of TiO₂, and the second dielectric film is disposed on the side of the support substrate and is formed of a mixture of ZnS and SiO₂.

6. An optical recording medium in accordance with Claim 4, wherein the light incidence plane is disposed on the side opposite to the support substrate with respect to the plurality of information recording layers, the first dielectric film is disposed on the side of the light incidence plane with respect to the recording layer and is formed of TiO₂, and the second dielectric film is disposed on the side of the support substrate and is formed of a mixture of ZnS and SiO₂.

7. An optical recording medium in accordance with Claim 1, wherein the recording layer is constituted by a first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing one element selected from the group consisting of Cu, Al, Zn, Ti and Ag and different from the element contained in the first recording film as a primary component.

8. An optical recording medium in accordance with Claim 2, wherein the recording layer is constituted by a first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing
5 one element selected from the group consisting of Cu, Al, Zn, Ti and Ag and different from the element contained in the first recording film as a primary component.

9. An optical recording medium in accordance with Claim 3, wherein
10 the recording layer is constituted by a first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing one element selected from the group consisting of Cu, Al, Zn, Ti and Ag and different from the element contained in the first recording film as a
15 primary component.

10. An optical recording medium in accordance with Claim 4, wherein the recording layer is constituted by a first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing
20 one element selected from the group consisting of Cu, Al, Zn, Ti and Ag and different from the element contained in the first recording film as a primary component.

25 11. An optical recording medium in accordance with Claim 5, wherein the recording layer is constituted by a first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing

one element selected from the group consisting of Cu, Al, Zn, Ti and Ag and different from the element contained in the first recording film as a primary component.

5 12. An optical recording medium in accordance with Claim 6, wherein the recording layer is constituted by a first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film containing one element selected from the group consisting of Cu, Al, Zn, Ti and Ag
10 and different from the element contained in the first recording film as a primary component.

13. An optical recording medium in accordance with Claim 7, wherein the first recording film contains Si as a primary component and the
15 second recording film contains Cu as a primary component.

14. An optical recording medium in accordance with Claim 8, wherein the first recording film contains Si as a primary component and the second recording film contains Cu as a primary component.
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15. An optical recording medium in accordance with Claim 9, wherein the first recording film contains Si as a primary component and the second recording film contains Cu as a primary component.

25 16. An optical recording medium in accordance with Claim 10, wherein the first recording film contains Si as a primary component and the second recording film contains Cu as a primary component.

17. An optical recording medium in accordance with Claim 11, wherein the first recording film contains Si as a primary component and the second recording film contains Cu as a primary component.

5 18. An optical recording medium in accordance with Claim 12, wherein the first recording film contains Si as a primary component and the second recording film contains Cu as a primary component.

19. An optical recording medium comprising a support substrate and a
10 plurality of information recording layers, at least one information recording layer other than an information recording layer farthest from a light incidence plane through which a laser beam is projected comprising a first dielectric film, a second dielectric film and a recording layer disposed between the first dielectric film and the second dielectric film,
15 and at least one of the first dielectric film and the second dielectric film being formed of a mixture of ZnS and SiO₂ so as to have a thickness of 100 nm to 130 nm.